

REMARKS

Reconsideration and allowance in view of the foregoing amendment and the following remarks are respectfully requested. Claims 1, 36, 38, 40 and 42 are amended without prejudice or disclaimer. New claims 46-49 have been added.

Rejection of Claims 1-35 Under 35 U.S.C. §112

The Office Action rejects claims 1-33 and 36-44 under 35 U.S.C. §112, second paragraph, being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant has amended claims 1, 36, 38, 40 and 42 to recite “service level agreement.” This clarifies the reference to what “guarantees” are associated with in the first and second request. Accordingly, Applicant requests withdrawal of the 35 U.S.C. §112 rejection.

Rejection of Claims 1-10, 16, 23, 27-34 and 36-45 Under 35 U.S.C. §103(a)

The Office Action rejects claims 1-10, 16, 23, 27-34 and 36-45 under 35 U.S.C. §103(a) as being unpatentable over Neiman et al. (U.S. Patent Publication No. 2003/0154112) (“Neiman et al.”) in view of Kan (U.S. Patent No. 5,355,508) (“Kan”). Applicant traverses this rejection but submits claim amendments to address the current cited art.

Page 4 of the Office Action asserts that Kan discloses a system controller 43 that will recognize resources in data processing units SIMD 50 or MIMD 51 or both. The Office Action cites column 7, lines 32-40 and column 8, lines 37-47, 52-55 and 62-66. The Office Action concludes “as such, after receiving the hybrid request, it’s understood the system co-allocates both types of processing elements at the same time.” (Emphasis in original.) The Office Action does concede that Kan does not specifically teach the co-allocation map that was generated but considers that within the level of a person of ordinary skill in the art.

Applicant traverses this analysis but notes that the teachings of Kan focus on providing two different processing units, in SIMD and MIMD processing unit, in the same system. Column 7, lines 38-40 state “due to this function, different types of parallel processing can be used simultaneously with the same procedure in a single system.” The Abstract of Kan explains that an SIMD type parallel data processing system and an MIMD type parallel data processing system have multiple instruction and data streams for performing high speed data processing. They have merits and demerits in each of their suitable application fields. Kan’s disclosure focuses on connecting an SIMD type parallel processing unit and an MIMD type parallel ~~processing unit~~ to a common bus and memory in the same system. Kan highlights the feature of having the SIMD and MIMD type data processing units being close together in the same system. See, column 3, lines 18-27, lines 35-55. They explain at column 4, line 10, that a data processing system according to their embodiment in the invention combines the SIMD type parallel processing unit from Figure 4 and the MIMD type parallel processing unit of Figure 5 into a single system. Thus, column 7, line 38, explains “due to this function, different types of parallel processing can be used simultaneously with the same procedure within a single system. In the conventional system, different systems must be used to utilize different types of parallel processing methods, and the procedure for each processing method is different.” As we shall see, the claims have been amended to avoid the Kan system.

Claim 1 is amended to recite wherein the first type of resource and the second type of resource span one or more servers each having homogeneous processor architecture. In this case, inasmuch as Kan clearly discloses providing a “single system” with different types of processor, Applicant submits that claim 1 is now patentable and in condition for allowance. Claims 36, 38 and 40 also each include the same claim limitation and thus clearly avoid the disclosure of Kan.

Therefore, claim 1 and its dependent claims 2-33 are patentable and in condition for allowance. Amended claim 36 and its dependent claim 37 are also patentable and in condition for allowance. Claim 38 and its dependent claim 39 are patentable as well. Claim 40 and its dependent claim 41 are also patentable. Finally, claim 42 and its dependent claims 43-44 are patentable and in condition for allowance as well.

Applicant also provides new claim 46. This claim recites wherein the first type of resource and the second type of resource are on different computing devices in the compute environment. In this case, Kan clearly teaches away from such an approach by combining the SIMD type parallel data processing unit and the MIMD type parallel data processing unit onto a single system. Kan teaches away from an approach which involves this limitation of new claim 46. Therefore, claim 45 is patentable and in condition for allowance.

New claim 47 recites a step of generating a co-allocation map between the first type of resource and the second type of resource. The co-allocation map covering resources on at least two network servers in the computer environment. Inasmuch as Kan again focuses on combining the SIMD type parallel data processing unit and the MIMD type parallel data processing unit within a single system, Applicant submits that Kan fails to disclose or suggest this limitation.

Therefore, claim 47 and its dependent claim 48 are patentable and in condition for allowance.

New claim 49 recites that the co-allocation map covers at least two different types of resources in a single server in a compute environment. The single server having a homogeneous processor architecture. Clearly, Kan fails to disclose a single server having a homogeneous processor architecture inasmuch as it expressly criticizes such an approach. Inasmuch as the thrust of the teachings of Kan are on providing a single system with an SIMD type parallel data

processing unit and an MIMD type parallel data processing unit, Applicant submits that they clearly cannot teach a single server in the compute environment that has a homogeneous processor architecture. Accordingly, new claim 49 is patentable and in condition for allowance.

Rejection of Claims 11-15, 17-22 and 24-26 Under 35 U.S.C. §103(a)

The Office Action rejects claims 1-10, 16, 23, 27-34 and 36-45 under 35 U.S.C. §103(a) as being unpatentable over Neiman et al. in view of Kan and Rottoo (WO 98/58518) ("Rottoo"). Inasmuch as these claims depend from patentable parent claims, they are each patentable.

Assignee further reserves the right to argue against any combination of cited art in future prosecution.

CONCLUSION

Having addressed all rejections and objections, Applicant respectfully submits that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited. If necessary, the Commissioner for Patents is authorized to charge or credit the **Novak, Druce & Quigg, LLP, Account No. 14-1437** for any deficiency or overpayment.

Respectfully submitted,

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